

WHAT IS CLAIMED IS:

1. A method of cleaving a fusion protein including a first component which comprises all or part of a Caulobacter S-layer protein including a Caulobacter C-terminal secretion signal, and a second component heterologous to Caulobacter, the fusion protein containing at least one aspartate-proline dipeptide, wherein the method comprises combining the fusion protein with an acid solution of a strength insufficient to solubilize the fusion protein for a time sufficient for cleavage of the fusion protein at said aspartate-proline dipeptide.
2. The method of claim 1 wherein a aspartate-proline dipeptide is situated between the first and second components or adjacent a junction between the first and second components.
3. The method of claim 1 or 2, wherein the acid solution has a pH of from about 1.5 to about 2.5.
4. The method of claim 1 or 2, wherein the acid solution has a pH of about 1.65 to about 2.35.
5. The method of any one of claims 1-4 wherein the method is carried out at a temperature in the range of about 30° C. to about 50° C.
6. The method of any one of claims 1-5, wherein the method further comprises separating products cleaved from the fusion protein.
7. A method of preparing a DNA construct for expression of a fusion protein suitable for use in the method of claim 1, wherein the method comprises joining an upstream DNA segment including DNA heterologous to Caulobacter which encodes a protein

